

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF WISCONSIN

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SEMICONDUCTOR ENERGY  
LABORATORY CO., LTD.,

Plaintiff,  
v.

OPINION AND ORDER

09-cv-01-bbc

SAMSUNG ELECTRONICS CO., LTD.,  
S-LCD CORPORATION, SAMSUNG  
ELECTRONICS AMERICA, INC., and  
SAMSUNG TELECOMMUNICATIONS  
AMERICA, LLC,

Defendants.

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In this patent infringement lawsuit, plaintiff Semiconductor Energy Laboratory Company, Ltd. contends that certain liquid crystal display products made by defendants Samsung Electronics Company, Ltd., S-LCD Corporation, Samsung Electronics America, Inc. and Samsung Telecommunications America, LLC infringe four of plaintiff's patents relating to thin-film transistors: United States Patent Nos. 6,900,463 (the '463 patent), 7,215,402 (the '402 patent), 7,394,516 (the '516 patent) and 7,413,937 (the '937 patent). Defendants have asserted affirmative defenses and counterclaims. Among other things, they allege that the patents are unenforceable because of plaintiff's inequitable conduct before the

United States Patent and Trademark Office. Dkt. #83. Plaintiff responded with a motion to dismiss defendant's inequitable conduct affirmative defenses and counterclaims set forth in paragraphs 80-209, 230-33, 242-45, 254-57 and 266-69 of their first amended answer, defenses and counterclaims. Dkt. #92. The motion is before the court for decision.

Plaintiff contends that defendants' defenses and counterclaims are deficient for failing to plead the elements of inequitable conduct with particularity as required under Fed. R. Civ. P. 9(b) and Exergen Corporation v. Wal-Mart Stores, Inc., 575 F.3d 1312 (Fed. Cir. 2009). Plaintiff faults defendants for not identifying the who, what, where, when and how of the alleged inequitable conduct and failing to allege sufficient facts showing deceptive intent. Defendants deny that their allegations are deficient, and in the alternative, request that they be granted leave to amend their pleading.

I am granting plaintiff's motion to dismiss in part. Because I find that the patent examiner was aware that plaintiff had been found guilty of inequitable conduct in a previous lawsuit, it is not plausible to infer that plaintiff engaged in inequitable conduct in failing to disclose that fact during the prosecution of the '463 patent. Therefore, I will dismiss defendants' counterclaim and affirmative defense that the '463 patent is unenforceable for plaintiff's failure to disclose the findings of inequitable conduct in a previous lawsuit. Because defendants have pleaded themselves out of court with respect to this counterclaim, their request for leave to amend it will be denied. (I note that after briefing was completed

on plaintiff's motion to dismiss, defendants moved for leave to file a second amended answer, defenses and counterclaims, setting forth additional factual support for this particular counterclaim. Dkt. #144. That motion came under advisement only recently and has not yet been considered by the court. Whether defendants' newly amended counterclaim will survive scrutiny will be the subject of a separate order.

I find also that defendants have failed to allege sufficient facts with respect to plaintiff's alleged false representations about experiments described in the '463 patent specification; plaintiff's deceptive intent in prosecuting the '516 patent; and the identity of unnamed "patent attorneys" who allegedly failed to disclose prior art references material to the '937 patent. Because defendants' request for leave to amend these counterclaims was not made in bad faith and will not be futile or result in undue delay or prejudice, I will dismiss the counterclaims without prejudice and allow defendants to amend them to add the necessary factual allegations.

Defendants have pleaded their remaining counterclaims of inequitable conduct with respect to the '463, '402 and '937 patents with sufficient particularity. Accordingly, plaintiff's motion to dismiss those counterclaims will be denied.

In their first amended answer, defenses and counterclaims, defendants have fairly alleged the following facts.

## ALLEGATIONS OF FACT

### A. The '463 Patent

Plaintiff Semiconductor Energy Laboratory Company, Ltd.'s '463 patent relates to thin-film transistors. Gerald J. Ferguson, Jr. and Eric J. Robinson of Sixbey, Friedman, Leedom & Ferguson, P.C., represented plaintiff during the prosecution of the '463 patent. Dr. Shunpei Yamazaki is a named inventor of the '463 patent and directly controlled the prosecution of the '463 patent, as president and majority shareholder of plaintiff.

#### 1. Failure to disclose previous litigation involving the '636 patent

On October 10, 1996, plaintiff sued defendants in the United States District Court for the Eastern District of Virginia for infringement of U.S. Pat. No. 5,543,636 (the '636 patent), which also relates to thin-film transistors and is not at issue in this lawsuit. Although the '636 and '463 patents belong to different patent families, they are closely related and have substantially similar claims. Both patents disclose a thin-film transistor comprising a nonsingle crystal semiconductor material containing hydrogen or a halogen and having an intrinsic conductivity type. The channel region of the thin-film transistor structure disclosed in both patents is sandwiched between a silicon nitride gate insulator and another insulator. On August 12, 1997, plaintiff amended pending claims 1, 2, 8, 9, 12, and 14 of the '463 patent to mirror the limitation found in claims 4, 5 and 7 of the '636 patent.

On September 4, 1997, defendants filed an amended answer and counterclaim in the Virginia litigation, alleging that the '636 patent was unenforceable because of inequitable conduct. On April 15, 1998, the district court found the '636 patent unenforceable because of plaintiff's inequitable conduct before the United States Patent and Trademark Office. Semiconductor Energy Laboratory Co., Ltd. v. Samsung Electronics Co., Ltd., 4 F. Supp. 2d 477 (E.D. Va. 1998), recons. denied, 24 F. Supp. 2d 537 (E.D. Va. 1998) ("SEL I"). The court held that plaintiff had intentionally withheld Japanese Laid-Open Application No. 56-135968, even though it had submitted the reference to the patent office. The court found that plaintiff had acted in a misleading manner by submitting only a partial translation and concise explanation of the reference and omitting key material teachings. The court also found that plaintiff had made another intentional misrepresentation when it told the patent office that a 1983 article by C.C. Tsai applied primarily to solar cells rather than thin-film transistors, thereby misleading the examiner about the materiality of the article. The Court of Appeals for the Federal Circuit affirmed these findings on March 2, 2000. Semiconductor Energy Laboratory Co., Ltd. v. Samsung Electronics Co., Ltd., 204 F.3d 1368, 1370 (Fed. Cir. 2000) ("SEL II").

During the prosecution of the '463 patent at issue in this case, Yamazaki, Ferguson and Robinson did not disclose or bring to the attention of the Patent and Trademark Office examiner the allegations and findings of inequitable conduct regarding the '636 patent.

Yamazaki is the only inventor named on the '636 patent. He testified during the SEL I litigation. Ferguson and Robinson were aware of SEL I and SEL II during the prosecution of the '463 patent, and knew about the allegations and ruling of inequitable conduct. During the SEL I litigation, Ferguson was identified specifically as having engaged in inequitable conduct.

During the prosecution of the '463 patent, plaintiff did not file a notice of litigation or information disclosure statement regarding SEL I and SEL II. However, plaintiff submitted multiple notices of litigation regarding another lawsuit in which it had sued Acer Incorporated and related entities in the Northern District of California. During the prosecution of the '463 patent, plaintiff provided the patent office copies of the complaint and answer, invalidity contentions and orders, summary judgment motions and orders and expert reports from the Acer litigation. In an October 8, 2003 information disclosure statement and notice of litigation submission, plaintiff stated:

In accordance with the provisions of MPEP 2001.06(c) and 37 C.F.R. §§ 1.56, 1.97 and 1.98, the Patent Office's attention is directed to the attached documents that have recently been filed in litigation between the Assignee and Acer Incorporated, Acer America Corporation, and AU Optronics Corporation ("Acer").

Although plaintiff attached the SEL I and SEL II opinions as exhibits to declarations in support of the summary judgment motions filed in the Acer litigation, the exhibits were only two of the more than 100 references consisting of more than 3000 pages of material.

## 2. Failure to disclose prior art

During the prosecution of the '463 patent, Yamazaki did not inform the patent office of U.S. Pat. No. 4,072,974 (the '974 patent), a prior art reference. The '974 patent discloses a thin-film transistor with many of the distinguishing features of the thin-film transistor claimed by independent claims 1, 5, 8 and 12-14 of the '463 patent. Columns 2 and 3 of the '974 patent disclose a thin-film transistor comprising a pair of source and drain regions, a channel region between the source and drain regions, a gate electrode adjacent to the channel region and a gate insulating film which is in direct contact with the channel region that comprises a nitride. The thin-film transistor claimed by independent claims 1, 5, 8 and 12-14 of the '463 patent includes similar limitations. Column 4 of the '974 patent discloses the use of a non-single crystal semiconductor material for the source and drain regions. The source and drain regions defined in independent claims 1, 5, 8 and 12-14 of the '463 patent also use non-single crystal semiconductor material. Column 4 of the '974 patent incorporates by reference the teachings of U.S. Pat. No. 3,698,947 (the Kemlage patent), which discloses hydrogenation of silicon. Independent claims 1, 5, 8 and 12-14 of the '463 patent each include the hydrogenation of silicon.

The '974 patent discloses in a single reference the use of a nitride gate insulating film over non-single crystal semiconductor material source and drain regions and the hydrogenation of silicon. During the prosecution of the '463 patent, plaintiff argued that

one of the primary reasons the claimed subject matter was patentable over the prior art was because the claim limitations disclosed a silicon nitride gate insulating film over the channel, source and drain regions.

Plaintiff disclosed the '974 patent during the prosecution of at least nine other patents that issued before plaintiff filed the '463 patent, including U.S. Pat. No. 5,315,132 (the '132 patent). Yamazaki was a named inventor on each of the nine patents. On March 9, 1993, during plaintiff's prosecution of the '132 patent, the examiner rejected the pending claims in part because of the '974 patent. The examiner remarked that the '132 patent disclosed a thin-film transistor with polycrystalline source, drain and channel regions and indicated that the '974 patent disclosed a thin-film transistor that included a channel region of a first conductivity type; source and drain regions of an opposite conductivity type formed on either side of the channel region; a gate insulating layer over the channel, source and drain regions; and a gate electrode over the gate insulating layer.

### 3. Affirmative misrepresentations of material fact

Columns 8 and 9 of the '463 patent describe certain experiments purportedly conducted on a semiconductor device embodying an example described in the "Description of the Preferred Embodiments" (or Example 1). However, the experiments described in the '463 patent were not conducted before plaintiff filed the priority application for the '463

patent. During a deposition taken in the Acer litigation on April 30, 2003, Yamazaki admitted that prior to June 30, 1980 it had not built or tested the device described in the '463 patent's Japanese priority application, which corresponds to Example 1 in the '463 patent.

The experiments discussed in the '463 patent purported to demonstrate the beneficial properties of the source and drain elements in claims 1, 5, 12, and 13. The experiment discussed at column 8, lines 11-17, relates to forming a semi-amorphous semiconductor region "S2." The stated results of the experiment included a finding that "the number of recombination centers in the semi-amorphous semiconductor S2 was extremely small," contributing to the "excellent properties" of the semi-amorphous semiconductor material. The semi-amorphous semiconductor material described in the experiments forms the source and drain elements of the thin-film transistor claimed in claims 1, 5, 12 and 13 of the '463 patent.

#### B. The '402 Patent

On June 23, 2004, during the prosecution of the '402 patent at issue in this case, the examiner rejected the pending claims in light of U.S. Pat. No. 5,108,650 (the Koden patent). In an October 25, 2004 response, Yamazaki and plaintiff's patent attorney, John F. Hayden of Fish & Richardson P.C., argued that the Koden patent and other prior art references did

not disclose a sealing material that was in contact with the inorganic insulating film, a limitation found in the '402 patent. Plaintiff did not dispute any of the examiner's other conclusions regarding elements of the '402 patent that were disclosed in either the Koden patent or other prior art references. On January 1, 2005, the examiner allowed the pending '402 patent claims on the ground that the prior art did not teach a sealing material in contact with the inorganic insulating film.

On February 2, 2006, Yamazaki and Hayden submitted the original Japanese version of Japanese Publication Number JP 06-138491 (the JP '491 reference) and a partial English translation of the abstract to the patent office. The JP '491 reference discloses a sealant in contact with an inorganic insulating film, which is the distinguishing limitation that plaintiff had argued was not found in the prior art and on which the examiner relied in issuing the '402 patent. However, the partial translation that Yamazaki and Hayden provided did not describe this limitation.

Yamazaki had learned about the JP '491 reference while prosecuting the '402 patent's Japanese priority application, JP 08-277485 (the JP '485 application), on which he is named as an inventor. On November 11, 2005, the Japanese examiner rejected the JP '485 application in part because of the JP '491 reference. The examiner pointed specifically to the JP '491 reference's arrangement of sealing material and insulating layer and Figure 4, which discloses an inorganic insulating layer in contact with the sealant. Before prosecuting

the '402 patent, Yamazaki had cited the JP '491 reference in plaintiff's U.S. Pat. Nos. 7,474,376 and 7,333,160.

### C. The '516 Patent

The '516 patent at issue in this case claims priority to Japanese Patent Application No. 7-350229 (the JP '229 application) filed on December 21, 1995. The '516 patent and the JP '229 application both

- Disclose a liquid crystal display device that includes a substrate interval correction layer disposed under the sealing material.
- Claim a thin-film liquid crystal device comprising two substrates and a matrix of insulated, conductive lines.
- Claim a substrate interval correction layer that is (1) made from the same material as the conductive lines, (2) electrically isolated and (3) disposed between the sealing member and a first substrate.
- Claim a driver circuit disposed within a region surrounded by the sealing material.
- Share almost identical drawings.

In an office action dated January 4, 2005, a Japanese patent examiner rejected the JP '229 application in reliance on two prior art references: (1) the JP '811 reference and (2) Japanese Patent No. 06-186578 (the JP '578 reference). In the office action, the Japanese examiner rejected claims 1-4, 6, 8-13, and 20-21 solely on the basis of the JP '811 reference.

The examiner rejected claims 1-23 after considering the JP '811 and JP '578 references in combination. The JP '811 reference discloses many of the claimed features of the '516 patent, including a liquid crystal display device that includes a substrate interval correction layer between the seal and the substrate and a substrate interval correction layer that is made from the same material as the scanning or signal lines and is electrically isolated from the scanning and signal lines.

During the prosecution of the '516 patent at issue, plaintiff argued that the claims were allowable over prior art in part because the prior art failed to disclose “an arrangement in which the conductive layer is electrically isolated from both the plurality of first conductive lines and the plurality of second conductive lines, . . . or in which the conductive layer is electrically isolated from both the plurality of scanning lines and the plurality of signal lines . . . .” The JP '811 reference also discloses a substrate interval correction layer that is electrically isolated from both the scanning and signal lines. The '516 patent was still pending in the patent office at the time of the Japanese priority application’s rejection. On March 9, 2005, plaintiff filed an information disclosure statement disclosing all of the references cited by the Japanese examiner except the JP '811 reference. Yamazaki was aware of the teachings of the JP '811 reference because he had cited it in the Japanese priority application. Plaintiff stated only that “each item of information contained in this statement, with the exception of [U.S. Pat. No. 5,285,301], was cited in a communication from a

foreign patent office in a counterpart foreign application, the communication being dated January 11, 2005.” Plaintiff did not disclose the fact that the Japanese patent authorities had relied upon the references to reject claims in a closely related Japanese counterpart application.

D. The ‘937 Patent

1. The ‘542 patent and the JP ‘745 reference

The ‘542 patent is an earlier patent in the same family as the ‘937 patent. Independent claim 1 of the ‘542 patent and independent claims 8 and 26 of the ‘937 patent relate to a semiconductor device having a specific three-film insulating stack formed upon the semiconductor device. Yamazaki is a named inventor on both the ‘542 patent and the ‘937 patent.

During the prosecution of the ‘542 patent, Yamazaki and plaintiff’s patent attorney, Scott C. Harris of Fish & Richardson P.C., did not disclose information about Japanese Publication Number 59-72745 (the JP ‘745 reference), a prior art reference. Plaintiff submitted an original Japanese version of the JP ‘745 reference and an English translation of the abstract to the patent office. The abstract discloses a three-film insulating stack for a semiconductor device comprising a first silicon nitride film, an organic polyimide film above the first silicon nitride film and a second silicon nitride film above the polyimide film.

However, the untranslated portion of the JP '745 reference, including Figure 2 and related text, discloses another embodiment of the insulating stack that includes a silicon nitride film, an inorganic film above the silicon nitride film and an organic film above the inorganic film.

On October 15, 1997, after a first rejection based in part on the English abstract of the JP '745 reference, plaintiff canceled all of the original claims of the '542 patent and submitted new claims. On March 31, 1998, after a second rejection, plaintiff amended its claims again. Independent claim 12 recited a three-film insulating stack with a first inter-layer insulating film comprising silicon nitride, a silicon nitride film formed above the first inter-layer film and an organic film formed on the silicon nitride film, similar to the insulating stack disclosed in the untranslated portion of the JP '745 reference. Plaintiff pointed to the three-film insulating stack as a reason for the patentability of its new claims although it knew of the insulating stack disclosed in the JP '745 reference.

During the prosecution of the '937 patent, on April 5, 2007, Yamazaki and plaintiff's patent attorneys submitted an original Japanese version of the JP '745 reference with only an English translation of the abstract. The untranslated portion of the JP '745 reference, including Figure 2 and related text, discloses insulation films that are recited in claims 8 and 26 of the '937 patent.

## 2. Failure to disclose the '826 patent

During the prosecution of the '937 patent at issue, Yamazaki and plaintiff's patent attorneys failed to disclose prior art reference U.S. Pat. No. 5,656,826 (the '826 patent). The '826 patent teaches the use of three insulting layers in a thin-film transistor device and discloses a three-film passivation stack (silicon nitride-inorganic-organic) over a thin film transistor that corresponds to and discloses the "first insulation film," "second insulation film" and "organic resin film" recited in claims 8 and 26 of the '937 patent.

Plaintiff disclosed the '826 patent in at least nineteen other patents that issued before the filing date of the '937 patent, including U.S. Pat. No. 7,098,479 (the '479 patent), on which Yamazaki is a named inventor. On October 18, 2001, the examiner rejected the pending claims of the '479 patent in part because the '826 patent "shows an insulating film 84, 95 which covers both the pixel and driver transistors and can function or be labeled as a 'leveling film'." In response, plaintiff acknowledged that the '826 patent discloses a leveling film, but distinguished the '826 patent on other grounds.

## OPINION

A motion to dismiss does not test the merits of a pleading but rather the sufficiency of its allegations. Gibson v. City of Chicago, 910 F.2d 1510, 1520 (7th Cir. 1990). The court must accept as true well-pleaded factual allegations, drawing all reasonable inferences in favor of the pleading party. Moranski v. General Motors Corp., 433 F.3d 537, 539 (7th Cir. 2005).

Dismissal is warranted when a complaint fails to allege “enough facts to raise a reasonable expectation that discovery will reveal evidence’ supporting the plaintiff’s allegations.” Brooks v. Ross, 578 F.3d 574, 581 (7th Cir. 2009) (quoting Bell Atlantic Corp. v. Twombly, 550 U.S. 544, 556 (2007)). Further, Rule 9(b) requires that “[i]n all averments of fraud or mistake, the circumstances constituting fraud or mistake shall be stated with particularity.” Although inequitable conduct is a broader concept than common law fraud, it must be pleaded with particularity. Exergen Corp. v. Wal-Mart Stores, Inc., 575 F.3d 1312, 1326 (Fed. Cir. 2009) (citing Ferguson Beauregard/Logic Controls, Division of Dover Resources, Inc. v. Mega Systems, LLC, 350 F.3d 1327, 1344 (Fed. Cir. 2003)); Central Admixture Pharmacy Services, Inc. v. Advanced Cardiac Solutions, P.C., 482 F.3d 1347, 1356 (Fed. Cir. 2007)). Finally, the court may dismiss a pleading for failure to state a claim under Rule 12(b)(6) if “it appears beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief.” Ashcroft v. Iqbal, 129 S. Ct. 1937, 1953 (2009).

To prove a patent unenforceable because of inequitable conduct, the challenges must prove by clear and convincing evidence that an individual associated with the filing and prosecution of a patent application (1) made an affirmative representation of material fact, failed to disclose material information or submitted false material information; and (2) intended to deceive the Patent and Trademark Office. Star Scientific, Inc. v. R.J. Reynolds

Tobacco Company, 537 F.3d 1357, 1365 (Fed. Cir. 2008); Impax Laboratories, Inc. v. Aventis Pharmaceuticals, Inc., 468 F.3d 1366, 1374 (Fed. Cir. 2006). In other words, to plead inequitable conduct with sufficient particularity, a party must identify “the specific who, what, when, where, and how of the material misrepresentation or omission.” Exergen, 575 F.3d at 1327 (citing DiLeo v. Ernst & Young, 901 F.2d 624, 627 (7th Cir. 1990)). Although Rule 9(b) states that intent may be “averred generally,” the challenger must allege sufficient underlying facts from which a court may reasonably infer that “a specific individual (1) knew of the withheld material information or of the falsity of the material misrepresentation, and (2) withheld or misrepresented this information with a specific intent to deceive the patent office.” Id. at 1328-29 (citations omitted).

#### A. The ‘463 Patent

Defendants contend that the ‘463 patent is not enforceable because Yamazaki and plaintiff’s patent attorneys committed the following misconduct before the United States Patent and Trademark Office: 1) failed to disclose the findings of inequitable conduct in SEL I and SEL II with respect to the ‘636 patent; 2) failed to disclose the ‘974 patent, a prior art reference; and 3) misrepresented the experiments described in the ‘463 patent specification. They also contend that plaintiff’s inequitable conduct in connection with the

‘636 patent renders the ‘463 patent unenforceable under the doctrine of “infectious unenforceability.”

#### 1. SEL I and SEL II and the ‘636 patent

According to defendants, plaintiff submitted information about SEL I and SEL II only in the context of discussing the Acer litigation and did not file a separate notice of litigation or otherwise notify the examiner of those decisions. In response, plaintiff points out that it submitted to the patent office all the documents defendants contend were withheld. Defendants cannot deny the truth of this assertion because it is implicit in their own allegation that the documents were “buried.”

By definition, documents cannot be “buried” unless they were submitted to the patent office. Fiskars, Inc. v. Hunt Manufacturing Company, 221 F.3d 1318, 1327 (Fed. Cir. 2000), in which the Court of Appeals for the Federal Circuit noted that “[a]n applicant can not be guilty of inequitable conduct if the reference was cited to the examiner”; see also Scripps Clinic & Research Fdn. v. Genentech, Inc., 927 F.2d 1565, 1582 (Fed. Cir. 1991), overruled on other grounds by Abbott Laboratories v. Sandoz, Inc., 566 F.3d 1282 (Fed. Cir. 2009) (“When a reference has been considered by the examiner, it is not controlling how it came to the examiner’s attention.”)).

The Federal Circuit has recognized in dicta that a reference may be characterized in such a way as to mislead the patent office. Molins v. PLC v. Textron, Inc., 48 F.3d 1172, 1183-84 (Fed. Cir. 1995). In Molins, the court used as an example Penn Yan Boats, Inc. v. Sea Lark Boats, Inc., 359 F. Supp. 948 (S.D. Fla. 1972), a case in which the district court found the patentee committed inequitable conduct. The patentee had submitted a patent that had issued more than a year after the filing date of the patent application at issue and, as the district court found, had buried it in a list of references supposedly discovered as a result of a preexamination search. Id. at 965. In Molins, however, the Federal Circuit distinguished Penn Yan on the ground that the Molins reference was not characterized in a misleading way but was simply submitted along with several other references. Id. at 1184. The court of appeals determined that the joint submission was not clear and convincing evidence of bad faith, especially when the examiner had initialed each reference, signifying that he had considered it. Id.

Five years later, the Federal Circuit decided Fiskars, 221 F.3d at 1326-27. In that case, the patent examiner had not considered a prior art reference that plaintiff had included only in a brochure submitted to the patent office. The defendant argued that the plaintiff should have both identified the reference more explicitly and emphasized its relevance as prior art. Id. at 1327. However, the court of appeals found that because the examiner decided on his own accord not to consider the reference, the patentee had no obligation to

tell the patent office about it twice. Id. (“An applicant can not be guilty of inequitable conduct if the reference was cited to the examiner.”).

As plaintiff notes, some district courts have interpreted Fiskars as precluding any inequitable conduct claim that rests upon alleged burying of material references. In a recent case, a district court in Delaware addressed the issue and concluded that “[w]hile dicta in Molins supports the contention that ‘burying’ a reference can be probative of bad faith, . . . this is contradicted by the decision of the case and by the clear precedent of Scripps and FiskarsSymbol Technologies, Inc. v. Aruba Networks, Inc., 609 F. Supp. 2d 353, 358 (D. Del. 2009) (citing Fiskars, 221 F.3d at 1327, and Scripps, 927 F.2d at 1582).

I agree that merely burying a material reference in a long list of citations is unlikely to support a claim of inequitable conduct where there is no other evidence of an intent to deceive the patent examiner. First Years, Inc. v. Munchkin, Inc., 2008 WL 4682553, \*3 (W.D. Wis. 2008) (finding that plaintiffs’ alleged concealment of reference failed to state a claim of inequitable conduct because defendant failed to allege plaintiffs’ intent to deceive). However, I am not convinced that as a matter of law, the holdings in Fiskars and Scripps preclude all inequitable conduct claims alleging the burying or concealing of a reference. In fact, in SEL II, 204 F.3d at 1376, the Federal Circuit found that plaintiff’s intent to deceive the patent office could be inferred from its disclosure of a partial translation of a Japanese reference, even though plaintiff had submitted a full, untranslated version, because the

partial translation omitted key teachings of the reference that rendered the pending claims unpatentable. Nonetheless, I can conclude that under Fiskars and Scripps, the facts alleged in this case do not support a claim of inequitable conduct against plaintiff for allegedly burying the SEL I and SEL II opinions.

Defendants allege that during the prosecution of the ‘463 patent, they raised their inequitable conduct defense with respect to the ‘636 patent at issue in SEL I. In response, plaintiff allegedly withdrew the pending ‘463 patent claims, replaced them with a set of claims similar to those in the ‘636 patent and did not disclose the ‘636 patent litigation directly in a separate notice to the patent office, instead concealing it among summary judgment materials from an entirely different case. However, defendants admit that the patent examiner in this case had access to the full court opinions in SEL I and SEL II. Although plaintiff may have attempted to place the focus on the Acer litigation, both opinions are listed twice as “Other Publications” under “References Cited” on the face on the ‘463 patent. Am. Cpt., dkt. #55, Exh. A at 3, col. 1 and at 6, col. 1. Absent allegations to the contrary, it is presumed that a patent examiner does his job and considers references listed on the face of the patent. Manual of Patent Examining Procedure § 609.06 (“citation . . . considered by the examiner will be printed on the patent”); Molins, 48 F.3d at 1184; Innogenetics N.V. v. Abbott Laboratories, 2006 WL 2619888, at \*7 (W.D. Wis. July 17,

2006) (holding that presumption is that patent examiners do their job and consider cited prior art references).

Although plaintiff's agents could have referred to SEL I and SEL II more directly, I cannot infer from defendants' allegations that plaintiff omitted key aspects of the prior art reference deliberately, as in SEL II, or affirmatively mischaracterized the reference, as in Penn Yan. Once the patent examiner became aware of the reference, plaintiff did not have an obligation to emphasize its importance. Fiskars, 221 F.3d at 1327. How that information came to examiner's attention is irrelevant. Scripps, 927 F.2d at 1582 ("When a reference was before the examiner, whether through the examiner's search or the applicant's disclosure, it can not be deemed to have been withheld from the examiner."). Accordingly, I will dismiss defendants' counterclaim and affirmative defense that the '463 patent is unenforceable for plaintiff's failure to disclose the findings of inequitable conduct in SEL I and SEL II. Because defendants have pleaded themselves out of court with respect to this counterclaim, their request for leave to amend it will be denied.

## 2. Infectious unenforceability of the '636 patent

Defendants contend that plaintiff's inequitable conduct during the prosecution of the '636 patent renders the '463 patent unenforceable under the "doctrine of infectious unenforceability," more commonly referred to as "unclean hands." Precision Instrument

Manufacturing Co. v. Automotive Maintenance Machinery Co., 324 U.S. 806, 815 (1945); Keystone Driller Co. v. General Excavator Co., 290 U.S. 240, 245-46 (1933). Under that doctrine, inequitable conduct committed during the prosecution of one patent may render another patent unenforceable if there is an “immediate and necessary” relationship between the inequitable conduct and the patent-in-suit. Agfa Corp. v. Creo Products Inc., 451 F.3d 1366, 1379 (Fed. Cir. 2006) (continuation patent unenforceable because of inequitable conduct found in prosecution of parent application); Consolidated Aluminum Corp. v. Foseco International Ltd., 910 F.2d 804, 811-12 (Fed. Cir. 1990) (patentee’s inequitable conduct in prosecuting past patent permeated prosecution of patents-in-suit and rendered them unenforceable); Driscoll v. Cebalo, 731 F.2d 878, 885 (Fed. Cir. 1984) (applicant who withheld material prior art in parent application should not be exculpated simply because patent office has not yet allowed claims in continuing application). Plaintiff asserts that defendants have failed to allege the requisite relationship between the ‘636 patent and the ‘463 patent.

Defendants allege that the ‘636 and ‘463 patents both disclose a thin-film transistor comprising a nonsingle crystal semiconductor material containing hydrogen or a halogen and having an intrinsic conductivity type. The channel region of the thin-film transistor structure disclosed in both patents is sandwiched between a silicon nitride gate insulator and another insulator. Defendants allege that claims 1, 2, 8, 9, 12 and 14 of the ‘463 patent

mirror the limitation found in claims 4, 5 and 7 of the '636 patent. Although plaintiff argues that defendants only generally allege similarities in the two patents' subject matter and claims without explaining how the specific inequitable conduct in the prosecution of the '636 patent benefited plaintiff during the '463 patent prosecution, defendants identified the specific claims of the '636 patent that were found unenforceable because of plaintiff's inequitable conduct and allege that plaintiff recaptured those claims in three claims in the '463 patent. This is enough to meet defendants' burden.

In a second effort to challenge the adequacy of defendants' allegations, plaintiff alleges that every claim of the '636 patent contains a low impurity limitation not found in the claims of the '463 patent, Op. and Order on Mot. to Transfer, dkt. #49 at 5-6, but this is unpersuasive. The fact that the claims of the '636 patent are more limited than those in the '463 patent only benefits plaintiff, allegedly allowing it to recapture the invalid claims in a new, broader patent. Any inequitable conduct found with respect to the more limited claims still would "infect" the subsequent, broader claims. Accordingly, with respect to the '463 patent, I will deny plaintiff's motion to dismiss defendants' counterclaim and affirmative defense of inequitable conduct based on plaintiff's unclean hands.

3. The '974 patent

Plaintiff asserts that defendants failed to allege sufficient facts showing that Yamazaki was aware of the specific information in the '974 patent that allegedly is material to the '463 patent. I disagree. With respect to deceptive intent, defendants allege that Yamazaki was a named inventor of the '974 patent and had knowledge of it because he disclosed it during the prosecution of at least nine other patents that plaintiff issued before filing the '463 patent, including the '132 patent. Yamazaki also was a named inventor on those nine patents. Plaintiff asserts that “[t]he mere fact that an applicant disclosed a reference during prosecution of one application, but did not disclose it during prosecution of a related application, is insufficient to meet the threshold level of deceptive intent required to support an allegation of inequitable conduct.” Exergen, 575 F.3d at 1331. Unlike the defendants in Exergen, however, defendants in this case have alleged that the individual who had previously cited the '974 patent knew of the specific material information in the '463 patent.

Id.

Yamazaki was a named inventor and responsible for prosecuting all of the patents in question. As further evidence of Yamazaki's knowledge, defendants allege that on March 9, 1993, during plaintiff's prosecution of the '132 patent, the examiner rejected the pending claims in part because of the '974 patent. The examiner remarked to Yamazaki that the '132 patent disclosed a thin-film transistor with polycrystalline source, drain and channel

regions and indicated that the '974 patent disclosed a thin-film transistor that included a channel region of a first conductivity type; source and drain regions of an opposite conductivity type formed on either side of the channel region; a gate insulating layer over the channel, source and drain regions; and a gate electrode over the gate insulating layer.

Plaintiff argues that these allegations fall short because defendants have not alleged that Yamazaki knew that the '974 patent disclosed a gate-insulating film *made of nitride*, that it incorporated the teachings of the Kemlage patent that discloses the hydrogenation of silicon or that it used a non-single crystal semiconductor material. Plaintiff is wrong. Yamazaki's knowledge of each of these disclosures can be inferred reasonably from the fact that he was a named inventor on the '974 patent. Finally, defendants allege that during the prosecution of the '463 patent, Yamazaki argued that one of the primary reasons the claimed subject matter was patentable over the prior art was because it disclosed a *nitride* gate insulating film over the channel, source and drain regions, all made from *silicon*. Thus, it is also reasonable to infer that Yamazaki was aware of the importance of these elements to the '463 patent.

In sum, defendants' allegations in this case exceed those in Exergen, 575 F.3d at 1330-31, where the defendants based their allegations solely on "information and belief" without setting forth the source of the information and the reasons for the belief. It is reasonable to infer from the facts alleged by defendants that Yamazaki was aware of the specific information related to

thin-film transistors in the '974 patent that defendants claim is material to the '463 patent. Accordingly, I will deny plaintiff's motion to dismiss defendants' inequitable conduct counterclaim and affirmative defense related to the non-disclosure of the '974 patent .

### 3. Experiments in the '463 patent

The parties' dispute over experiments focuses on representations Yamazaki made to the patent office about certain experiments described in the '463 patent. The issue is whether he made false representations to the patent office when he told it that experiments had been conducted on a semiconductor device before plaintiff filed the domestic priority application for the '463 patent on June 29, 1981. According to defendants, Yamazaki admitted in a 2003 deposition that the device in question had not been built before June 30, 1980. Assuming this is true, defendants' allegations do not establish that the experiments were not conducted between June 1980 and June 28, 1981. Defendants' allegations do not support a conclusion that Yamazaki lied to the patent office. It is plausible that plaintiff built and tested the device within the one-year period. Without some reason to believe otherwise, such as a showing that the building and testing of such a device is too time-intensive to complete within a year, I will not allow defendants to proceed on their counterclaim.

I will grant plaintiff's motion to dismiss defendants' inequitable conduct counterclaim and affirmative defense related to misrepresentations of material fact regarding the experiments described in the '463 patent, but without prejudice. Because defendants have made plaintiff well aware of the substance of their counterclaim and there is no evidence of undue delay, bad faith or futility, I will grant them leave to amend their pleading to correct the deficiencies in this counterclaim.

B. The '402 Patent

With respect to defendants' allegations that plaintiff failed to disclose the JP '491 reference during the prosecution of the '402 patent, plaintiff contends that defendants do not explain why the reference is not cumulative of any other prior art, as required by Exergen. In Exergen, 575 F.3d at 1329, the court of appeals found the defendant's pleading deficient in part because it alleged only generally that certain references withheld by the plaintiff were material and not cumulative of information already in the record. The court noted that the defendant did not identify the particular claim limitations, which were "necessary to explain both 'why' the withheld information is material and not cumulative, and 'how' an examiner would have used this information in assessing the patentability of the claims." Id. at 1329-30.

In this case, defendants allege specifically why they believe that the JP '491 reference is not cumulative. They allege that the reference discloses a distinguishing limitation, a sealant in contact with an inorganic insulating film, that is also found in the '402 patent. According to defendants, during the prosecution of the '402 patent, the examiner relied on plaintiff's representation that the prior art did not include such a limitation. Defendants allege that although plaintiff submitted the original Japanese version of the JP '491 reference to the patent office, it submitted only a partial English translation that omitted the material limitation. From these allegations, I reasonably can infer that the '491 reference contained a limitation not found in any other prior art. Defendants have met their pleading burden with respect to their counterclaim that plaintiff committed inequitable conduct in prosecuting the '402 patent.

### C. The '516 Patent

Plaintiff challenges defendants' counterclaim that it failed to disclose prior art reference JP '811 on the grounds that defendants do not allege 1) what material information in the JP '811 reference is not cumulative of other evidence of record; 2) that Yamazaki was aware of either the '516 patent prosecution or the material information in the JP '811 reference; or 3) that Hayden was aware of the material information in the JP '811 reference. In their counterclaim, defendants identify which limitations in the JP '811 reference are

material to specific claims in the '516 patent. They also allege that plaintiff did not identify any other prior art with the same material limitations (a substrate interval correction layer that is electrically isolated from both the scanning and signal lines) found in the JP '811 reference. These allegations are sufficient to satisfy what, why and how information in the JP '811 reference is material to and non-cumulative of other evidence of record in the prosecution of the '516 patent.

Plaintiff asserts that it submitted U.S. Pat. No. 5,691,793, the United States counterpart to the JP '811 reference, to the patent office during the prosecution of the '516 patent. However, as plaintiff recognizes, that issue is outside the scope of the pleadings and would require a detailed comparison of two patents that are not directly in dispute in this lawsuit. Such an exercise is better left for summary judgment or trial after the parties have conducted further discovery on the issue.

Although defendants allege that Yamazaki and Hayden withheld the material information, they do not explain how either individual knew about it. Defendants do not allege that Yamazaki had any specific duty with respect to the '516 patent, apart from being president of plaintiff and the named inventor on several other patents, or that he should have known about the JP '811 reference. As plaintiff's patent attorney for the '516 patent, Hayden had a duty to disclose material information. However, defendants fail to allege how Hayden would have been aware of either the JP '811 reference or its materiality to the '516

patent. Defendants' counterclaim fails to meet the standard set forth in Exergen with respect to deceptive intent. Recognizing the potential deficiencies in their pleading, defendants request leave to amend their counterclaim. They explain that they have pending discovery requests that should reveal who had knowledge of the JP '811 reference. Because defendants have made plaintiff well aware of the substance of their counterclaim and the identity of who they believe to be at fault, there is no evidence of undue delay, bad faith, undue prejudice or futility. Therefore, I will grant defendants leave to amend their counterclaim to correct the deficiency identified in this order.

#### D. The '937 Patent

##### 1. The '542 patent and the JP '745 reference

Defendants allege that during the prosecution of the '542 patent, which is an earlier patent in the same family as the '937 patent, plaintiff withheld material information found in the JP '745 reference. They also allege that plaintiff continued to withhold material information in the reference during the later prosecution of the '937 patent. Plaintiff contends that defendants have failed to allege what specific information was withheld in the '542 patent prosecution and how that information affected the '937 patent prosecution. I disagree. Defendants identify a certain three-film insulating stack formed on the semiconductor device that is claimed in the '542 and '937 patents and disclosed in the JP

‘745 reference. Defendants allege also that plaintiff’s concealment of the feature disclosed in the JP ‘745 reference allowed plaintiff to obtain both the ‘542 and ‘937 patents.

Plaintiff also challenges defendants’ counterclaim on the ground that they have failed to plead deceptive intent with sufficient particularity. However, defendants allege that after Yamazaki submitted a partially translated version of the JP ‘745 reference to the patent office, the examiner twice rejected the claims of the ‘542 patent. Then, Yamazaki allegedly amended the claims to include a three-film insulating stack substantially similar to the insulating stack disclosed in the untranslated portion of the JP ‘745 reference and pointed to the three-film insulating stack as a reason for the patentability of the new claims. Later, during the prosecution of the ‘937 patent, Yamazaki allegedly failed to submit a translated portion of the JP ‘745 reference that included the insulation films that are recited in the ‘937 patent. It is reasonable to infer from these allegations that Yamazaki knew about the JP ‘745 reference and how it was material to both the ‘542 and ‘937 patent claims. Plaintiff’s motion to dismiss this counterclaim is denied.

As plaintiff points out, defendants’ general allegations that unnamed “patent attorneys” also withheld this reference from the patent office are insufficient to state a separate claim under the Exergen standard. However, defendants’ failure to state a claim against more than one individual does not warrant dismissal of the entire counterclaim. If defendants intend to pursue the counterclaim against the patent attorneys as well as

Yamazaki, they should amend their pleading to identify those attorneys and their participation in the alleged inequitable conduct.

## 2. Failure to disclose the '826 patent

Defendants allege that Yamazaki and plaintiff's patent attorneys failed to disclose the '826 patent, a prior art reference, in prosecuting the '937 patent. As previously discussed, defendants' references to unnamed patent attorneys are insufficient to state a claim against those individuals. However, defendants state a valid claim against Yamazaki. They identify specific insulating films that are disclosed both in the '826 patent and specifically-identified claims of the '937 patent and allege that this information was not contained in the record before the patent office. With respect to deceptive intent, defendants allege that Yamazaki knew about the material information because he had disclosed the '826 patent in at least nineteen other patents issued before the filing date of the '937 patent, including the '479 patent, on which he is a named inventor. Defendants allege that the examiner rejected the pending claims of the '479 patent in part because of the claims of the '826 patent relating to insulating films.

Plaintiff asserts that there is a lack of connection between the information of which Yamazaki allegedly was made aware in the '479 patent prosecution and the information in the '826 patent that defendants assert is material to the '937 patent. Plaintiff notes that the

examiner in the '479 patent prosecution referred to a *single* insulating or leveling film, whereas the '937 patent discloses a *three*-film passivation stack. Although ultimately this discrepancy may defeat defendants' counterclaim, it is nonetheless reasonable to infer that Yamazaki would have reviewed the '826 patent in some detail after receiving a rejection based on it and become aware of the three-film passivation stack allegedly material to the '937 patent. Plaintiff's motion to dismiss this counterclaim will be denied.

ORDER

IT IS ORDERED that plaintiff Semiconductor Energy Laboratory Company, Ltd.'s motion to dismiss the inequitable conduct counterclaims of defendants Samsung Electronics Company, Ltd., S-LCD Corporation, Samsung Electronics America, Inc. and Samsung Telecommunications America, LLC, dkt. #92, is GRANTED in part and DENIED in part:

1. Plaintiff's motion to dismiss defendants' counterclaim and affirmative defense that plaintiff failed to disclose previous findings of inequitable conduct in prosecuting U.S. Pat. 6,900,463 is GRANTED. That counterclaim and affirmative defense are DISMISSED with prejudice for failure to state a claim.
2. Plaintiff's motion to dismiss defendants' counterclaims and affirmative defenses relating to plaintiff's alleged false representations about experiments described in the '463 patent specification, plaintiff's deceptive intent in prosecuting U.S. Patent 7,394,516 patent

and unnamed “patent attorneys” who allegedly failed to disclose prior art references material to U.S. Patent 7,413,937 is GRANTED. Those counterclaims and affirmative defenses are DISMISSED without prejudice for failure to state a claim. Defendants’ request for leave to amend their pleading to correct the deficiencies identified in this order with respect to these counterclaims and affirmative defenses is GRANTED. Defendants may have until January 15, 2010, within which to submit an amended answer and counterclaims in accordance with this order.

3. Plaintiff’s motion to dismiss defendants’ remaining counterclaims and affirmative defenses with respect to U.S. Patents 6,900,463, 7,215,402 and 7,413,937 is DENIED.

Entered this 5th day of January, 2010.

BY THE COURT:  
/s/  
BARBARA B. CRABB  
District Judge

